



ARTHUR S. LANGENDERFER, INC., et al.,  
Plaintiffs-Appellees, Cross-Appellants,  
MacRitchie Materials, Inc., Proposed-Intervenor-  
Appellant, (81-3115),

v.

S.E. JOHNSON COMPANY, et al., Defendants-  
Appellants, Cross-Appellees.

Nos. 80-3705, 81-3065, 81-3114 and 81-3115.

United States Court of Appeals,  
Sixth Circuit.

Argued Oct. 29, 1982.

Decided March 15, 1984.

In antitrust action, the United States District Court for the Northern District of Ohio, Don J. Young, J., entered judgment upon jury verdict for plaintiffs, enjoined future acquisitions and anticompetitive acts and refused to allow posttrial intervention by company affiliated with plaintiff, and appeals and cross-appeals were taken. The Court of Appeals, Wellford, Circuit Judge, held that: (1) Sherman Act liability could not be premised on alleged predatory pricing without some evidence that defendant had charged prices below its total cost for product sold; (2) issue of whether plaintiff's injuries resulted from anticompetitive acts made possible by defendant's acquisitions was properly a jury question; (3) with exception of one acquisition, there was no evidence that any company acquired by defendant in asphalt hot-mix business was directly engaged in interstate commerce, as required by section seven of Clayton Act at time of trial; (4) section 16 of Clayton Act does not create private divestiture remedy; and (5) trial court did not abuse its discretion in denying posttrial motion for permissive intervention in injunctive relief hearings sought by sister company of plaintiff which competed in different product market.

Vacated and remanded.

Wilhoit, District Judge, sitting by designation, filed a dissenting opinion.

[1] MONOPOLIES ⇨ 12(1.3)  
265k12(1.3)

In order to recover under section two of Sherman Act, whether for monopolization or attempt to monopolize, plaintiff had to establish that defendant engaged in some type of prohibited anticompetitive conduct. Sherman Anti-Trust Act, § 2, 15 U.S.C.A. § 2.

[2] MONOPOLIES ⇨ 12(1.3)  
265k12(1.3)

To establish monopolization under section two of Sherman Act, plaintiff had to prove that defendant unfairly attained or maintained "monopoly power," that is, the power to control prices or exclude competition. Sherman Anti-Trust Act, § 2, 15 U.S.C.A. § 2.

See publication Words and Phrases for other judicial constructions and definitions.

[3] MONOPOLIES ⇨ 12(1.3)  
265k12(1.3)

To establish that defendant attempted to monopolize, plaintiff had to prove that defendant engaged in anticompetitive conduct with specific intent to monopolize and that attempt had dangerous probability of success. Sherman Anti-Trust Act, § 2, 15 U.S.C.A. § 2.

[4] MONOPOLIES ⇨ 28(8)  
265k28(8)

Even if evidence had been sufficient to avoid directed verdict on predatory pricing claim, trial court's failure to instruct jury on legal standard for predatory pricing was erroneous. Sherman Anti-Trust Act, § 2, 15 U.S.C.A. § 2.

[5] MONOPOLIES ⇨ 28(8)  
265k28(8)

Choice of cost-based standard for evaluating claims of predatory pricing is question of law to be decided by trial judge. Sherman Anti-Trust Act, § 2, 15 U.S.C.A. § 2.

[6] MONOPOLIES ⇨ 17(1.8)  
265k17(1.8)

To establish predatory pricing, plaintiff must prove that anticipated benefits of defendant's price depended on its tendency to discipline or eliminate competition and thereby enhance firm's long-term ability to reap benefits of monopoly power; if defendant's prices were below average total cost but

above average variable cost, plaintiff bears burden of showing defendant's pricing was predatory; if, however, plaintiff proves that defendant's prices were below average variable cost, plaintiff has established prima facie case of predatory pricing and burden shifts to defendant to prove that prices were justified without regard to any anticipated destructive effect they might have on competitors. Sherman Anti-Trust Act, § 2, 15 U.S.C.A. § 2.

[6] MONOPOLIES ⇨28(7.1)  
265k28(7.1)

To establish predatory pricing, plaintiff must prove that anticipated benefits of defendant's price depended on its tendency to discipline or eliminate competition and thereby enhance firm's long-term ability to reap benefits of monopoly power; if defendant's prices were below average total cost but above average variable cost, plaintiff bears burden of showing defendant's pricing was predatory; if, however, plaintiff proves that defendant's prices were below average variable cost, plaintiff has established prima facie case of predatory pricing and burden shifts to defendant to prove that prices were justified without regard to any anticipated destructive effect they might have on competitors. Sherman Anti-Trust Act, § 2, 15 U.S.C.A. § 2.

[6] MONOPOLIES ⇨28(7.5)  
265k28(7.5)  
Formerly 265k28(7.4)

To establish predatory pricing, plaintiff must prove that anticipated benefits of defendant's price depended on its tendency to discipline or eliminate competition and thereby enhance firm's long-term ability to reap benefits of monopoly power; if defendant's prices were below average total cost but above average variable cost, plaintiff bears burden of showing defendant's pricing was predatory; if, however, plaintiff proves that defendant's prices were below average variable cost, plaintiff has established prima facie case of predatory pricing and burden shifts to defendant to prove that prices were justified without regard to any anticipated destructive effect they might have on competitors. Sherman Anti-Trust Act, § 2, 15 U.S.C.A. § 2.

[7] MONOPOLIES ⇨17(1.8)  
265k17(1.8)

Motive or intent is distinguishing characteristic of predatory pricing; predatory pricing differs from healthy competitive pricing in its motive, in that

predator by his pricing practices seeks to impose losses on other firms, not garner gains for itself. Sherman Anti-Trust Act, § 2, 15 U.S.C.A. § 2.

[8] MONOPOLIES ⇨17(1.8)  
265k17(1.8)

Sherman Act liability cannot be premised on alleged predatory pricing without some evidence that defendant has charged prices below its total cost for product sold. Sherman Anti-Trust Act, § 2, 15 U.S.C.A. § 2.

[9] MONOPOLIES ⇨17(1.8)  
265k17(1.8)

Although substantial evidence indicated that defendant's chief officer intended to eliminate competition and dominate market, defendant was not guilty of predatory pricing, where defendant never bid below its own cost and continually made profits on its ventures. Sherman Anti-Trust Act, § 2, 15 U.S.C.A. § 2.

[10] MONOPOLIES ⇨24(14)  
265k24(14)

In action for violations of section seven of Clayton Act, issue of whether plaintiff's injuries resulted from anticompetitive acts made possible by defendant's acquisitions was properly a jury question. Clayton Act, § 7, as amended, 15 U.S.C.A. § 18.

[11] MONOPOLIES ⇨24(13)  
265k24(13)

With exception of one acquisition, there was no evidence that any company acquired by defendant in asphalt hot-mix business was directly engaged in interstate commerce, as required by section seven of Clayton Act at time of trial. Clayton Act, § 7, as amended, 15 U.S.C.A. § 18.

[12] MONOPOLIES ⇨24(7.1)  
265k24(7.1)  
Formerly 265k24(7)

Injunctive relief under section 16 of Clayton Act has three primary purposes: putting an end to illegal conduct; depriving violators of benefits of their illegal conduct; and restoring competition in marketplace. Clayton Act, § 16, as amended, 15 U.S.C.A. § 26.

[13] MONOPOLIES ⇨24(15)

265k24(15)

Section 16 of Clayton Act does not create private divestiture remedy. Clayton Act, § 16, as amended, 15 U.S.C.A. § 26.

[14] FEDERAL COURTS ⇨817

170Bk817

Denial of permissive intervention should be reversed only for clear abuse of discretion. Fed.Rules Civ.Proc.Rule 24(b), 28 U.S.C.A.

[15] FEDERAL CIVIL PROCEDURE ⇨320

170Ak320

In antitrust action, trial court did not abuse its discretion in denying posttrial motion for permissive intervention in injunctive relief hearings sought by sister company of plaintiff which competed in different product market. Fed.Rules Civ.Proc.Rule 24(b), 28 U.S.C.A.

\*1052 John M. Curphey (argued), Jack Zouhary, Robison, Curphey & O'Connell, Toledo, Ohio, M. Neal Rains, Arter & Hadden, Cleveland, Ohio, for defendants- appellants, cross-appellees.

Thomas Zraik, Reiser, Jacobs, Zraik & Szyperski, Toledo, Ohio, James Porter (argued), Walter J. Rekstis, III, Squire, Sanders & Dempsey, Cleveland, Ohio, for plaintiffs-appellees, cross-appellants.

Before LIVELY, Chief Judge, WELLFORD, Circuit Judge, and WILHOIT, District Judge. [FN\*]

FN\* Honorable Henry R. Wilhoit, Jr., U.S. District Court for the Eastern District of Kentucky, sitting by designation.

WELLFORD, Circuit Judge.

Defendants, S.E. Johnson Company (Johnson) and other affiliated entities (referred to collectively as Johnson Companies), appeal the judgments and orders entered by the district court against them following a unanimous jury verdict for plaintiffs in this private antitrust action for alleged violations of Sections 1 and 2 of the Sherman Antitrust Act, 15 U.S.C. §§ 1, 2, and Section 7 of the Clayton Antitrust Act, 15 U.S.C. § 18. Plaintiffs, Arthur S. Langenderfer, Inc. (Langenderfer), and its sister company, Northern Ohio Asphalt Paving Co. (NOAP), claimed defendants had combined and conspired to drive plaintiffs out of business by

various monopolistic and anticompetitive practices including, but not limited to, predatory pricing and illegal acquisitions. The jury found actual damages of \$982,117.00. The district court trebled the damage award to \$2,946,351.00 and enjoined future acquisitions and anticompetitive acts, pursuant to Sections 4 and 16 of the Clayton Act, 15 U.S.C. §§ 15, 26.

Defendants contend the district court erred by (1) failing to apply the appropriate legal standard to plaintiff's allegation of predatory pricing; (2) allowing the jury to find a violation of Section 7 of the Clayton Act, 15 U.S.C. § 18, on the basis of purely intrastate acquisitions; and (3) allowing damages for losses suffered outside the relevant market and beyond the statute of limitations period. Langenderfer cross-appeals from the district court's refusal to order divestiture and the refusal to allow post-trial intervention by a company affiliated with Langenderfer. We vacate the judgments below because of prejudicial error on the issues of predatory pricing and intrastate acquisitions.

## FACTS

Langenderfer and S.E. Johnson were competitors for many years in the business of supplying "hot-mix," [FN1] stone, sand and contracting services for highway construction and repair in northwest Ohio. Most of this work is administered and paid for by governmental bodies which invite competitive bids from paving contractors. [FN2] Federal and state highway projects are administered by the Ohio Department of Transportation (ODOT) and the Ohio Turnpike Commission (OTC) with substantial use of federal funds. [FN3] For the purpose of this appeal \*1053 the parties have stipulated the relevant product and geographic market to be asphalt highway paving contracts awarded by the OTC and ODOT in a thirteen county area of northwest Ohio.

FN1. "Hot-mix" is also known as asphaltic concrete. It is manufactured by combining liquid petroleum with a mixture of sand and crushed limestone at high temperatures.

FN2. State law requires competitive bidding. Ohio Rev.Code Chapters 5525 and 5537. State agencies determine where and whether a project will take place and reserve the right to reject any and all bids.

number of years. In 1979, just prior to the trial below, defendants paid \$3.5 million for Union Quarries Co., a profitable competitor that owned a quarry, a hot-mix plant and an asphalt paving business that served three counties in northwest Ohio.

Substantial evidence indicated that Kirkby, both individually and as chief officer of Johnson, intended to eliminate competition and dominate the market. In addition to the noncompetition agreements previously mentioned, there was considerable testimony that Kirkby or his agents had threatened or coerced several smaller competitors. Kirkby allegedly told one competitor that if he built an asphalt plant to compete with the Maumee plant, defendants would immediately build a larger facility across the street to drive the competition out of business. Another competitor who planned to build a hot-mix plant was told that defendant would not supply the necessary stone for operation of the plant. On another occasion, Kirkby allegedly said that he did not like Langenderfer or Miller (another competitor) and wanted to run them out of business.

Langenderfer presented expert testimony from several economists to the effect that Johnson's acquisitions significantly reduced competition and increased market concentration, thereby creating a monopolistic market structure. Statistical evidence does support this testimony. Defendants' average annual share of ODOT and OTC projects from 1966-1971 was 46.9%, but they took well over half of the available work during the 1972-78 period. [FN6] Johnson Companies did 75.8% of all turnpike paving in northwest Ohio during this period.

FN6. Defendants' annual shares of the relevant ODOT and OTC projects were as follows:  
1972-65.3%; 1973-57.6%; 1974-82.5%;  
1975-53.2%; 1976- 62.6%; 1977-70.4%;  
1978-51.3%.

In summary, Kirkby expanded operations of the Johnson Companies from two quarries and three hot-mix plants to seven quarries, fourteen hot-mix plants, and three sand pits. The horizontal acquisitions eliminated a noticeable segment of Johnson Companies' competition, and the vertical acquisitions gave defendants a captive supply of stone and sand for its asphalt paving jobs. Furthermore, defendants became primary stone

suppliers for the remaining asphalt paving competitors who did not own conveniently located quarries. As Johnson increased its share of the ever decreasing market, it also increased its profitability. From 1970 to 1978, its annual net profits more than doubled—from \$1.168 to \$2.717 million. During this same period, the Johnson Companies' competitors went from a combined net profit of \$655,000 to a combined net loss.

Langenderfer's claims of unreasonable restraint of trade in violation of Section 1 of the Sherman Act, monopolization and conspiracy or attempt to monopolize in violation of Section 2 of the Sherman Act, and illegal anticompetitive acquisitions in violation of Section 7 of the Clayton Act were all submitted to the jury. In support of the Sherman Act claims, Langenderfer alleged twelve separate monopolistic acts including, among others, predatory pricing, monopolistic pricing, price discrimination, exclusive dealing, refusals to deal, tying, and profit squeezing. The trial court denied defendants' request for special interrogatories. In returning the general verdict in favor of Langenderfer the jury was not required to specify which portions of the Sherman and/or Clayton Acts were violated nor which of the various alleged monopolistic acts were committed by appellants.

#### PREDATORY PRICING

[1][2][3] In order to recover under Section 2 of the Sherman Act, whether for monopolization [FN7] \*1055 or an attempt to monopolize, [FN8] Langenderfer had to establish that Johnson engaged in some type of prohibited anticompetitive conduct. *D & S Redi-Mix v. Sierra Redi-Mix & Contracting Co.*, 692 F.2d 1245 (9th Cir.1982). Langenderfer alleged several different kinds of anticompetitive acts, but the evidence presented at trial clearly focused on the claim of predatory pricing. [FN9] As the district court stated in the January 27, 1981, Final Judgment for Injunctive Relief:

FN7. To establish monopolization of the ODOT-OTC asphalt paving market, Langenderfer had to prove that Johnson unfairly attained or maintained monopoly power. *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71, 86 S.Ct. 1698, 1703-04, 16 L.Ed.2d 778 (1966). Monopoly power is "the power to control prices or exclude competition." *Id.* at 571, 86 S.Ct. at 1704.

FN8. To establish that Johnson attempted to monopolize the ODOT-OTC asphalt paving market, Langenderfer had to prove that appellant "engaged in anticompetitive conduct with the specific intent to monopolize and that the attempt had a dangerous probability of success." *Richter Concrete Corp. v. Hilltop Corp.*, 691 F.2d 818, 823 (6th Cir.1982), (quoting *United States v. Dairyman, Inc.*, 660 F.2d 192, 194 (6th Cir.1981)).

FN9. Support for the allegations of other types of anticompetitive conduct was meager at best. Although injunctive relief was granted against a broad array of wrongful acts, the trial court made the following observation about Langenderfer's proof:

Plaintiffs request injunctions against certain anticompetitive practices of the defendants which were not specifically proven by evidence at trial. For example, plaintiffs seek prohibitions against the defendants' alleged practices of charging discriminatory stone prices, refusing to sell stone or sand to plaintiffs, and tying sales of asphaltic concrete to purchases of stone and sand. (emphasis added)

The major thrust of much of the evidence at trial was aimed at the predatory nature of defendants' bidding on ODOT and OTC projects. At trial, plaintiffs vigorously attempted to show how defendants deliberately excluded competition by bidding low and deliberately sacrificing short term profits for the purpose of driving rivals out of business.

[4][5] Defendants contend that as a matter of law, predatory pricing was not established because Langenderfer presented no evidence that Johnson ever submitted a bid for an ODOT or OTC project at less than cost plus overhead. [FN10] In fact, defendants consistently made a profit on their successfully bid state highway and turnpike projects. Nevertheless, the district court denied Johnson's motion for a directed verdict on the issue and chose not to instruct the jury on the legal test for predatory pricing. [FN11] Instead, the trial court "felt it was appropriate to let the jury decide where that line was to be drawn." We conclude from all the evidence, however, that the trial court erred by failing to grant a directed verdict in favor of defendants on the issue of predatory pricing.

FN10. Langenderfer attempts to rely on the

testimony of Howard Shank who was Johnson's Vice President and chief bidding estimator. Shank testified that in preparing bids, he often programmed specific items below cost. The relevant product in this case, however, was the total package of asphalt paving materials and services, not specific line items in a contract bid. It matters little that Johnson might have employed a below-cost figure for gravel or any other item so long as the final bid exceeded the company's total projected costs.

FN11. Even if the evidence had been sufficient to avoid a directed verdict, the trial court's failure to instruct the jury on the legal standard for predatory pricing was erroneous. "The choice of a cost-based standard for evaluating claims of predatory pricing is a question of law to be decided by the trial judge." *M.C.I. Communications Corp. v. A.T. & T. Co.*, 708 F.2d 1081, 1111 (7th Cir.1983).

While we recognize the basis for Judge Wilhoit's concern as to predatory pricing, we are unpersuaded by his argument. If a producer has achieved greater efficiency due to his economies of scale, it would be contrary to the purposes of the Antitrust laws to require that he price his product at a level higher than what he requires to make a profit. Johnson continually made profits on its ventures. This is not a case where the defendant failed to account for his long term overhead costs in making his bids. The bids were above the total average costs. To require that Johnson's bids be above competitors' costs would deprive Johnson (and others similarly situated) of \*1056 reward from greater efficiency. This would serve only to stifle the incentive to compete. [FN12] Such cannot be the aim of the Antitrust laws of this country. See, *MCI Communications Corp. v. AT&T Co.*, 708 F.2d 1081 (7th Cir.1983); *Hanson v. Shell Oil Co.*, 541 F.2d 1352 (9th Cir.1976), cert. denied, 429 U.S. 1074, 97 S.Ct. 813, 50 L.Ed.2d 792 (1977).

FN12. Further support for this decision may be drawn from Judge Kennedy's dissent in *Borden, Inc. v. F.T.C.*, 674 F.2d 498, 519 (6th Cir.1982). While that case dealt with the manipulation of a price premium for a heavily advertised product, not below cost pricing, it was noted by that Judge that "business acumen includes shrewdness in profitable price competition, which is pricing above average variable cost; the Sherman Act does not distinguish competition on the basis of price and performance." *Id.*, citing *California Computer*

*Products v. International Business Machines Corp.*, 613 F.2d 727, 742-43 (9th Cir.1979). See also *Areeda & Turner*, "Predatory Pricing and Related Practices under Section 2 of the Sherman Act," 88 Harv.L.Rev. 697 (1975). Professor (now Judge) Posner would also agree that there is no violation where a monopolist sells above average total cost, as in the instant case. R. Posner, *Antitrust Law: An Economic Perspective*, 188 (1976), cited in *Borden, Inc. v. F.T.C.*, 674 F.2d at 519 n. 3. (Kennedy, dissenting).

[6] At the time of the trial below, this Circuit had not definitely declared a standard for evaluating claims of predatory pricing. Subsequently, however, a cost-based standard was adopted in *D.E. Rogers Associates, Inc. v. Gardner-Denver Co.*, 718 F.2d 1431 (6th Cir.1983), this court selected the Ninth Circuit's modification of the "Areeda/Turner" rule. See *Areeda & Turner*, *Predatory Pricing & Related Practices Under Section 2 of the Sherman Act*, 88 Harv.L.Rev. 697 (1975) (Pricing below marginal or average variable cost presumed predatory while pricing above marginal or average cost conclusively presumed legal). The Ninth Circuit standard was set forth in *William Inglis v. ITT Continental Baking Co.*, 668 F.2d 1014 (9th Cir.1981), cert. denied, 459 U.S. 825, 103 S.Ct. 57, 74 L.Ed.2d 61 (1982):

[W]e hold that to establish predatory pricing a plaintiff must prove that the anticipated benefits of defendant's price depended on its tendency to discipline or eliminate competition and thereby enhance the firm's long term ability to reap the benefits of monopoly power. If the defendant's prices were below average total cost but above average variable cost, the plaintiff bears the burden of showing defendant's pricing was predatory. If, however, the plaintiff proves that the defendant's prices were below average variable cost, the plaintiff has established a prima facie case of predatory pricing and the burden shifts to the defendant to prove that the prices were justified without regard to any anticipated destructive effect they might have on competitors.

*Id.* at 1035-36. Although this Circuit has adopted the above standard, we reject the Ninth Circuit's recent extension of that standard in *Transamerica Computer Co. v. I.B.M. Corp.*, 698 F.2d 1377 (9th Cir.1983) (pricing above average total costs may be deemed predatory upon clear and convincing proof of predatory intent).

Langenderfer's theory at trial (and in this appeal) was that defendants intentionally and consistently bid below the cost level of smaller competitors. Allegedly, Johnson could have submitted higher bids and still won the paving contracts, but it "left money on the table" in order to make it impossible for other firms to compete. Although Johnson never bid below its own cost, it supposedly engaged in a pattern of predation by forcing competitors to choose between foregoing sales or operating at a loss. No doubt this was an unpleasant choice for smaller firms such as Langenderfer, but Johnson cannot be found to have committed predatory pricing simply because it was more cost efficient than its competitors and could afford to submit a lower bid on the jobs in question. "It is the very nature of competition that the vigorous, efficient firm will drive out less efficient firms. This is not proscribed by the antitrust laws." *Janich Brothers, Inc. v. American Distilling Co.*, 570 F.2d 848, \*1057 855 (9th Cir.1977), cert. denied, 439 U.S. 829, 99 S.Ct. 103, 58 L.Ed.2d 122 (1978).

[7] Langenderfer's argument is premised on the false belief that predatory pricing may be found solely on the basis of the seller's intent. We agree that motive or intent is the distinguishing characteristic of predatory pricing, as this Circuit stated in *Richter Concrete Corp. v. Hilltop Concrete Corp.*, 691 F.2d 818 (6th Cir.1982):

Predatory pricing differs from healthy competitive pricing in its motive: "a predator by his pricing practices seeks 'to impose losses on other firms not garner gains for itself.' " *Malcolm v. Marathon Oil Co.*, 642 F.2d 845, 853- 54 (5th Cir.), cert. denied, 454 U.S. 1125, 102 S.Ct. 975, 71 L.Ed.2d 113 (1981) (footnote omitted).

691 F.2d at 823. Any definition of predatory pricing, however, must also accommodate the economic policies of the antitrust laws to promote efficiency, encourage vigorous competition and maximize consumer welfare.

The rule advocated by Langenderfer would work contrary to these goals by forcing a larger, more efficient firm to maintain artificially high prices to the detriment of the public. In *MCI Communications Corp. v. AT&T Co.*, 708 F.2d 1081 (7th Cir.1983), the court thoroughly reviewed the multiple evils that such a rule would occasion:

MCI nonetheless argues in its cross-appeal that the district court erred in requiring it to prove that AT

& T priced its Hi-Lo service below any measure of cost. MCI contends that if AT & T knowingly sacrificed revenue (i.e., failed to maximize its profits) with the intent to injure competition, this court should hold that behavior to constitute unlawful predatory pricing. In support of this "profit maximization" theory, MCI cites a trio of cases. *Hanson v. Shell Oil Co.*, 541 F.2d 1352, 1358 n. 5 (9th Cir.1976), cert. denied, 429 U.S. 1074, 97 S.Ct. 813, 50 L.Ed.2d 792 (1977); *International Air Industries, Inc. v. American Excelsior Co.*, 517 F.2d 714, 724 (5th Cir.1975), cert. denied, 424 U.S. 943, 96 S.Ct. 1411, 47 L.Ed.2d 349 (1976); *ILC Peripherals Leasing Corp. v. IBM Corp.*, 458 F.Supp. 423, 432 (N.D.Cal.1978), aff'd. per curiam sub nom. *Memorex Corp. v. IBM Corp.*, 636 F.2d 1188 (9th Cir.1980), cert. denied, 452 U.S. 972, 101 S.Ct. 3126, 69 L.Ed.2d 983 (1981).

Each of these cases contains language to the effect that a price may be predatory if it is below the short-run profit-maximizing price and barriers to new entry are great. Assuming, arguendo, that these statements are more than mere dicta, we must reject such a "profit maximization" theory as incompatible with the basic principles of antitrust. The ultimate danger of monopoly power is that prices will be too high, not too low. A rule of predation based on the failure to maximize profits would rob consumers of the benefits of any price reductions by dominant firms facing new competition. Such a rule would tend to freeze the prices of dominant firms at their monopoly levels and would prevent many pro-competitive price cuts beneficial to consumers and other purchasers. In addition a "profit maximization" rule would require extensive knowledge of demand characteristics--thus adding to its complexity and uncertainty. Another, and related, effect of adopting the "profit maximization" theory advocated by MCI would be to thrust the courts into the unseemly role of monitoring industrial prices to detect, on a long term basis, an elusive absence of "profit maximization." Such supervision is incompatible with the functioning of private markets. It is in the interest of competition to permit dominant firms to engage in vigorous competition, including price competition. See *Berkey Photo, Inc. v. Eastman Kodak Co.*, 603 F.2d 263, 273 (2d Cir.1979), cert. denied, 444 U.S. 1093, 100 S.Ct. 1061, 62 L.Ed.2d 783 (1980). We therefore reject MCI's "profit

maximization" theory and reaffirm this Circuit's holding that liability for predatory pricing must be based upon proof of pricing \*1058 below cost. *Chillicothe Sand & Gravel Co. v. Martin Marietta Corp.*, 615 F.2d 427 (7th Cir.1980).

Id. at 1114 (footnote omitted). As more succinctly stated in *Hanson v. Shell Oil Co.*, 541 F.2d 1352 (9th Cir.1976), cert. denied, 429 U.S. 1074, 97 S.Ct. 813, 50 L.Ed.2d 792 (1977):

The antitrust laws were not intended, and may not be used, to require businesses to price their products at unreasonably high prices (which penalize the consumer) so that less efficient competitors can stay in business. The Sherman Act is not a subsidy for inefficiency.

Id. at 1358-59. We agree with this rationale expressed in the MCI and Hanson cases.

[8][9] Johnson attained economies of scale which enabled it to operate at a much lower cost per paving project than its competitors. On the basis of the record presented, we can express no opinion about whether this position of strength may have resulted from some other types of prohibited anticompetitive acts. We hold only that, as a matter of law, Sherman Act liability cannot be premised on alleged predatory pricing without some evidence that a defendant has charged prices below its total cost for the product sold. Since Langenderfer premised its allegation of anticompetitive conduct almost entirely on the claim of predatory pricing and since the jury was not required to return special interrogatories, we cannot discern whether the jury verdict was based on the legally insufficient proof of predatory pricing or on the other allegations of anticompetitive acts. Consequently, we must vacate the judgment below and remand for new trial.

#### ACQUISITIONS

Johnson raises two arguments against assessment of liability for violations of Section 7 of the Clayton Act. First, defendants note that six of the acquired companies [FN13] rarely, if ever, competed with Langenderfer before they were acquired by Johnson. Consequently, they claim the acquisitions had no "anticompetitive effect" on Langenderfer as required under *Brunswick Corp. v. Pueblo Bowl-O-Mat, Inc.*, 429 U.S. 477, 489, 97 S.Ct. 690, 697, 50 L.Ed.2d 701 (1977). We find the argument unpersuasive because appellant mistakenly focuses on past competition between Langenderfer and the



acquired companies, and because appellant has misinterpreted the holding in Brunswick.

FN13. C.P. Calaway, Inc., Price Construction Co., Ohio Engineering, Fred R. Creager & Sons, Northwest Materials, Inc. and Union Quarries Company.

[10] The plaintiff in Brunswick sought to recover profits it claimed it would have reaped if Brunswick had not acquired and revitalized several failing bowling alleys that competed with plaintiff. Since the antitrust laws were never intended to provide redress for injury caused by increased competition, the court rejected plaintiff's theory.

Plaintiffs must prove antitrust injury, which is to say injury of the type the antitrust laws were intended to prevent and that flows from that which made defendants' acts unlawful. The injury should reflect the anticompetitive effect either of the violation or of anticompetitive acts made possible by the violation.

Id. at 489, 97 S.Ct. at 697. Brunswick does not require proof that the acquisitions had an "anticompetitive effect" on Langenderfer. Instead, Brunswick requires that Langenderfer's injury result either from a lessening of competition due to the acquisitions or from "anticompetitive acts made possible" by the acquisitions. One of Langenderfer's theories at trial was that the acquisitions eliminated the competitive pressures of the acquired companies and enabled defendants to engage in other monopolistic acts such as monopolistic pricing, profit squeezing, and predatory bidding. If true, this alone satisfies the requirement of Brunswick. Absent other error regarding the Clayton Act cause of action, the issue of whether Langenderfer's injuries resulted from "anticompetitive acts made \*1059 possible" by the acquisitions was properly a jury question.

Johnson next argues that none of the acquisitions met the jurisdictional requirement of Section 7 of the Clayton Act. At the time of trial the statute was limited to corporate acquisitions where both the acquiring and the acquired companies engaged in interstate commerce. [FN14] The district court granted Langenderfer's motion for a directed verdict as to Clayton Act jurisdiction because the companies all performed work on interstate highways. The court clearly erred.

FN14. The statute was amended in 1980 to expand jurisdiction to acquisitions in which both the acquiring and the acquired companies are "engaged in commerce or in any activity affecting commerce." Pub.L. No. 96-349, § 6(a), 94 Stat. 1157. Section 6(b) of Pub.L. No. 96-349 limited application of the amendment to acquisitions made after September 12, 1980.

In *United States v. American Building Maintenance Industries*, 422 U.S. 271, 95 S.Ct. 2150, 45 L.Ed.2d 177 (1975), the Supreme Court held that the Clayton Act, unlike the Sherman Act, does not reach companies engaged in purely intrastate activities even though there may be a substantial effect on interstate commerce. Langenderfer relies on *Fort Lauderdale v. East Coast Asphalt Corp.*, 329 F.2d 871, 872 (5th Cir.), cert. denied, 379 U.S. 900, 85 S.Ct. 187, 13 L.Ed.2d 175 (1964), for the rule that "contractors engaged in the construction of interstate highways and other facilities of interstate commerce are engaged 'in commerce.'" That "rule" is no longer valid, however, in light of *Gulf Oil Corp. v. Copp Paving Co.*, 419 U.S. 186, 95 S.Ct. 392, 42 L.Ed.2d 378 (1974). In *Copp Paving*, the Court reviewed the uniquely localized nature of asphalt hot-mix markets and held that intrastate sales of asphalt for use on interstate highways was not alone sufficient to establish jurisdiction under the Clayton Act.

[11] With the exception of Union Quarries Co., there is no evidence in the record that any of the acquired companies were directly engaged in interstate commerce. Langenderfer apparently chose to rely solely on the interstate highway nexus, as did the district court. As noted above, this was clear error under *American Building Maintenance* and *Copp Paving*. Based on the evidence presented at trial, the district court erred by granting a directed verdict in favor of Langenderfer, and by denying a directed verdict for Johnson Companies on the Clayton Act cause of action as to all of the acquisitions except Union Quarries Co.

Because of errors on the issues of Clayton Act jurisdiction and predatory pricing we conclude that we must vacate the judgment below. Consequently, we find it unnecessary to address appellants' arguments regarding the scope of damages allowed, and we express no opinion about the possible merits of those arguments.

### DIVESTITURE

On cross appeal Langenderfer contends the trial court erred by refusing to order divestiture of Union Quarries, Tri-State Sand & Gravel, two of Johnson's six quarries, and four of Johnson's twelve hot-mix plants. The district court held that the drastic remedy of divestiture was not necessary to restore competition. The court also doubted its authority to grant divestiture in favor of a private plaintiff under Section 16 of the Clayton Act.

[12] Langenderfer correctly observes that Section 16 injunctive relief has three primary purposes: "(1) putting an end to illegal conduct, (2) depriving violators of the benefits of their illegal conduct, and (3) restoring competition in the marketplace." In re Multidistrict Vehicle Air Pollution, 538 F.2d 231, 234 (9th Cir.1976) (citing Schine Chain Theatres, Inc. v. United States, 334 U.S. 110, 128-29, 68 S.Ct. 947, 957-58, 92 L.Ed. 1245 (1948)). We cannot, however, agree with Langenderfer's claim that the trial court's injunction against future acquisitions and anticompetitive acts only furthers the first of these purposes. Assuming culpability on the part of Johnson Companies, we believe the district court's injunction not only would deprive them of the primary benefits of their past \*1060 conduct—continued growth through acquisitions and guaranteed market dominance for the future—but also would serve to bring about a greater degree of competition by eliminating the barriers allegedly erected. In any event, the fact that the remedy fashioned by the district court may have served certain purposes to a lesser extent than others provides no ground for assignment of error.

[13] The more fundamental flaw in Langenderfer's argument is the proposition that divestiture is an available remedy in a suit instituted by a private plaintiff. Although several district courts have suggested that the remedy should be available, no court of appeals has so held. We find compelling the Ninth Circuit's decision, based on the legislative history of Section 16, that the statute does not create a private divestiture remedy. I.T. & T. Corp. v. G.T.E. Corp., 518 F.2d 913, 920-24 (9th Cir.1975). See also, Calnetics Corp. v. Volkswagen of America, Inc., 532 F.2d 674, 692-94 (9th Cir.1976); Continental Securities Co. v. Michigan Central Ry. Co., 16 F.2d 378, 379-80 (6th Cir.1926).

### PERMISSIVE INTERVENTION

MacRitchie Materials Co., a quarry operator and sister company of Langenderfer, filed a post-trial motion for permissive intervention in the injunctive relief hearings pursuant to Fed.R.Civ.P. 24(b). MacRitchie argued that it had an interest in the injunction proceedings because its own business interests were affected by Johnson's monopolistic practices. The district court found that MacRitchie's claims did not present sufficiently common questions of law and fact as had been addressed during trial and, accordingly, denied the motion. Claiming error, MacRitchie has cross-appealed the trial court ruling.

[14][15] "[T]he denial of permissive intervention should be reversed only for clear abuse of discretion." FMC Corp. v. Keizer Equipment Co., 433 F.2d 654, 656 (6th Cir.1970); Brewer v. Republic Steel Corp., 513 F.2d 1222 (6th Cir.1975). We find no abuse of discretion in this case. The trial below focused on the impact of Johnson's practices on a particular competitor in the asphalt paving market. MacRitchie, a different competitor in a different product market, cannot now complain about the denial of a post-trial motion filed four years after commencement of this action.

For the reasons set forth above, the judgment of the district court is VACATED and this case is REMANDED for retrial.

WILHOIT, District Judge, dissenting.

I respectfully dissent from the Court's view that as a matter of law, Sherman Act liability on the basis of predatory pricing cannot be proven without some evidence that a defendant has charged prices below its average total cost. This circuit has previously taken the view that evidence of intent to predatorily price can be proven either by direct evidence (subjective proof) or by indirect evidence, through analysis, of whether a defendant was pricing above or below average variable cost (objective proof). The latter analysis provides a surrogate measurement for marginal cost at output levels at or near a firm's optimal level of production. See D.E. Rogers Associates, Inc. v. Gardner-Denver Co., 718 F.2d 1431 (6th Cir.1983); Richter Concrete Corp. v. Hilltop Concrete Corp., 691 F.2d 818 (6th

Cir.1982); *Borden, Inc. v. Federal Trade Commission*, 674 F.2d 498 (6th Cir.1982). [FN1]

FN1. As the Court notes in its opinion, this Circuit has recently adopted the Ninth Circuit's modified "Areeda/Turner" rule. See ante at 1056. Areeda and Turner first propounded a most influential discussion of how a determination of average variable costs can fairly approximate marginal cost at output levels at or near a firm's optimal level of output. That level, of course, is where a firm is producing at its minimum average costs. Areeda & Turner, *Predatory Pricing & Related Practices Under Section 2 of the Sherman Act*, 88 Harv.L.Rev. 697 (1975).

D.E. Rogers, 718 F.2d 1431, the case in which this circuit adopted the modified "Areeda/Turner" rule, makes no mention of what the rule should be in situations where, as here, the defendant was pricing at a level above average total cost. Areeda and Turner would presume such to be legal. The majority today agrees. I do not, however, because I believe evidence of intent in circumstances such as presented in this case should play a substantial role in determining whether predatory pricing has occurred.

\*1061 The Court takes a different approach today. It says, in effect, that irrespective of any direct evidence of intent to predatorily price, if a defendant can prove objectively that his prices were above his average total costs, his conduct is per se legal. This gives me pause. What the Court seems to do is to create a "free zone" in which monopolists can exploit their power without fear of Sherman Act scrutiny or sanctions. *Transamerica Computer Co. v. IBM Corp.*, 698 F.2d 1377, 1387 (9th Cir.1983).

The fact is that the question of proving average variable and fixed costs can be most difficult. Indeed, another panel of this court recently confronted a perfect example of just how hard it is to allocate "costs" in antitrust cases. See D.E. Rogers, 718 F.2d at 1435. In that case there was a great deal of argument as to what should be included in the average cost figures. Due to the inherent uncertainty and imprecision in determining "cost," I am persuaded by the view expressed by the Ninth Circuit Court of Appeals in that it is simply unwise to create a per se legal zone of predatory pricing irrespective of other conduct and circumstances. See *Transamerica*, 698 F.2d at 1387. To do so simply encourages litigants to skewer their accounting data to be above or below average total

cost.

Beyond these practical problems of proof, the record in this case convinces me that Johnson was found to be guilty of monopolistic practices, including predatory pricing. The evidence is clear that Johnson specifically intended to drive Langenderfer out of business. Moreover, Johnson's rapid and numerous vertical as well as horizontal acquisitions documents well that it had the power to carry out this intent.

The alleged predatory pricing in this case was nothing more than a manifestation of Johnson's monopoly power. The majority readily admits that Johnson had "attained economies of scale which enabled it to operate at a much lower cost per paving project than its competitors." Ante at 1058. It is clear, therefore, that Johnson possessed substantial market power over its competitors, market power which when coupled with the evidence of Johnson's increasing market share (from 46.9% to 75.8%) indicates it undoubtedly possessed monopoly power.

Because Johnson possessed monopoly power, the only other issue for purposes of determining § 2 Sherman Act liability is whether Johnson acquired or maintained that power willfully and intentionally as opposed to mere growth due to a superior product or business acumen. See *United States v. Grinnell Corp.*, 384 U.S. 563, 86 S.Ct. 1698, 16 L.Ed.2d 778 (1966). In this case, I believe that Johnson willfully and intentionally used its inordinate market power to acquire and maintain a monopoly. Direct evidence of its intent substantiates this. But more importantly, Johnson's conduct establishes it in my mind beyond all doubt.

In an industry such as involved here, entrance barriers are unusually high. Start-up costs are enormous. Moreover, Johnson raised these entrance barriers even higher by its many vertical acquisitions. Competitors and potential competitors were discouraged from competing with Johnson because they had to get their supplies from Johnson.

In addition, because of Johnson's ability to operate at lower costs, a perfect climate existed for Johnson to predate. Johnson was able to bid paving contracts at price levels above its average total costs but low enough to drive competitors out of the market and

discourage potential competitors from entering. This practice has sometimes been called "limit pricing" and the fear that a monopolist might undertake it was what probably inspired the Ninth Circuit in *Transamerica*. [FN2]

FN2. In *Transamerica*, 698 F.2d at 1387, the Ninth Circuit discusses how, in an industry where a substantial initial investment is required, a monopolist could predate with a pricing strategy that is above average total cost but below the profit maximizing price of competitors or potential competitors. This strategy is labeled "limit pricing", and appears to be the type of strategy employed by Johnson here.

\*1062 The majority lays aside the many circumstances raised in this case and focuses instead on the pristine economic view that pricing at or above average total cost is what competition is supposed to effect.

Unfortunately, the real world is not as it is always assumed in economics. If predatory pricing were the only allegation made in this case and there were no other evidences of monopoly power or monopolistic conduct and intent, I would agree with the majority. Predatory pricing cannot and should not be a competitor's complaint absent an abundance of evidence suggesting the alleged predator not only has the intent to predate, but also the ready ability, as in this case, to carry predation out. Cf. *Transamerica*, 698 F.2d at 1388. [FN3]

FN3. The *Transamerica* case's so-called "extension," see ante at 1056, of *William Inglis & Sons Baking Co. v. ITT Continental Baking Co.*, 668 F.2d 1014 (9th Cir.1981), cert. denied, 459 U.S. 825, 103 S.Ct. 58, 74 L.Ed.2d 61 (1982), which the majority today refuses to follow, is the natural outgrowth of the *Inglis* case. The Ninth Circuit has consistently indicated, even prior to *Inglis*, that given the right set of facts concerning a defendant's motive and conduct, it might very well hold a limit pricing strategy impermissible. See *California Computer Product, Inc. v. IBM Corp.*, 613 F.2d 727, 743 (9th Cir.1979); *Hanson v. Shell Oil Co.*, 541 F.2d 1352, 1358 n. 5 (9th Cir.1976), cert. denied, 429 U.S. 1074, 97 S.Ct. 813, 50 L.Ed.2d 792 (1977).

The *Transamerica* case takes the *Inglis* rule the next logical step and adopts a reasonable view of how to treat an alleged predator's prices that are above its average total cost. It allocates a heavy burden upon the plaintiff to prove by clear and

convincing evidence, that the defendant was predatorily pricing. *Transamerica*, 698 F.2d at 1388. At the same time, however, it does not allow a monopolist, such as Johnson in this case, to escape liability on the basis of predatory pricing merely because it did not price below its average total cost.

The *D.E. Rogers*, 718 F.2d at 1436, case in this circuit likewise suggests that the Sixth Circuit would not permit a limit pricing scheme at or above average total cost upon a strong showing of motive and/or other monopolistic conduct. While *D.E. Rogers* does not directly present the issue decided today, it does indicate just as *Transamerica*'s predecessors that "direct evidence bearing on the issue of [a defendant's] motive" is an important consideration. *Id.* at 1437. Indeed, only because of the absence of, or ambiguous nature of, such direct evidence was a cost-based analysis even resorted to in that case. See *id.* at 1435.

Nonetheless, as pointed out, I am firmly convinced by the record at hand that Johnson possessed monopoly power and that it used predatory pricing in the form of "limit pricing," among other things such as restrictive contracts and acquisitions, to maintain that monopoly power.

For instance, the majority opinion seems to dismiss the testimony of Howard Shank, Johnson's Vice-President, as mattering little. See ante at 1055 n. 10. The Court's view of Shank's testimony might be correct in other circumstances but on the facts of this case, it overlooks the extent of Johnson's vertical integration. The Court states that "[i]t matters little that Johnson might have employed a below-cost figure for gravel or any other item so long as the final bid exceeded the company's total projected costs." *Id.* (emphasis in original).

This overlooks the fact that Johnson was probably the only supplier of gravel in the relevant region. It supplied both its own needs and that of its competitors. Johnson could, therefore, raise the price of gravel to its competitors and thereby subsidize sales of gravel to itself. These below-cost line items may very well be a significant indicator of how Johnson was able to keep its "average total cost" figures so low. Having convinced the court that its "costs" were low, indeed lower than its final bid, Johnson has all but successfully defended this action for under the rule announced today, skillful juggling of cost figures has put appellant in the per

se legal zone, i.e., pricing above average total costs.

I, therefore, respectfully dissent from the majority's view. I think Johnson possessed monopoly power and intended, as evidenced by its conduct, to maintain that power in contravention of Section 2 of

the Sherman Act. I would therefore affirm \*1063 the district court and remand this case only with respect to the question of remedy.

END OF DOCUMENT



for the propositions that a monopolist with economies of scale may be able to discourage competition without pricing below average variable cost, and that a monopolist with excess capacity may be able to implement such a strategy without pricing below average total cost. n1039 NTN then argues that, since AT&T enjoys both economies of scale and excess capacity, use of the average variable cost standard will not only not prevent AT&T from predating, but will amount to practical deregulation of AT&T's prices. n1040 NTN also contends that average variable cost, to the extent it has been adopted by courts, has been used only as a threshold below which prices could be presumed predatory, and that this is not the same as adopting average variable cost as a criterion for deciding whether a firm has engaged in predation. n1041

n1038 NTN Comments at 16-20.

n1039 NTN Comments at 16-17, quoting Scherer, *Predatory Pricing and the Sherman Act: A Comment*, 89 Harv. L. Rev. 869, 871 (1976).

n1040 NTN Comments at 17, 19; accord Cable & Wireless Comments at 31.

n1041 NTN Comments at 18. NTN also cites a string of cases which, it claims, demonstrates that courts do not fully accept average variable cost as a test for predation. *Id.* at n.27.

497. In reply, AT&T asserts that the analysis upon which NTN relies was intended to address a situation in which a monopolist could acquire excess capacity for the sole purpose of discouraging competitive entry. AT&T states that this analysis is irrelevant to the interexchange industry, because numerous competitors already have sunk excess capacity that cannot be driven

[\*3114] out of the market by AT&T's lowering its prices. n1042 AT&T cites its own academic authority to the effect that, in order to avoid chilling competitive price reductions, this Commission should require a strong showing to rebut that presumption, and should entertain such challenges only after the price increase has taken effect and actual market evidence is available. n1043

n1042 AT&T Reply at 44-45.

n1043 AT&T Reply at 45-46, citing statement of P. Areeda, AT&T Comments, Appendix A at 12-13, and P. Areeda & D. F. Turner, *Scherer on Predatory Pricing: A Reply*, 89 Harv. L. Rev. 891, 897 (1976). AT&T also cites numerous court cases in support of the position that average variable cost is a rational test that permits genuine price competition while protecting against predation. AT&T Reply at 47 n.\*.

### iii. Discussion

498. We affirm our tentative conclusion that a tariff proposing below-band rates should be filed on 45 days' notice and accompanied by a showing that the rates cover the cost of service and are otherwise just, reasonable, and nondiscriminatory. For the purpose of initial review of such tariffs, we adopt the average variable cost standard as the standard for determining whether a proposed rate decrease must be suspended pending investigation.

499. Price reductions are ordinarily good for consumers, though not pleasing

to competitors. Predatory pricing, though often alleged, is generally uncommon, and proven cases are rare. n1044 We have, through the structure of AT&T's service baskets, n1045 created conditions under which predation should be as unlikely in the interexchange telecommunications market as it is in the economy generally. Although an abundance of caution has led us to deny streamlined treatment to below-band rate decreases, we are convinced that such below-band reductions as are possible within the limits of our price cap scheme are more likely to be competitive than predatory. Such reductions should, therefore, be reviewed against a standard which requires suspension only of those rates which are so low that they can be presumed to be anticompetitive. As AT&T's competitors point out, average variable cost is just such a standard.

n1044 See P. Areeda & D. Turner, *Antitrust Law* (1978) P711; R. Koller, *The Myth of Predatory Pricing: An Empirical Study*, 4 *Antitrust L. & Econ. Rev.* 105 (1971); see generally J. Kwoka & L. White, *The Antitrust Revolution* (1989).

n1045 See Section III.C.2., *supra*.

[\*3115] 500. While there is not unanimity on the proper definition of predatory pricing n1046 an examination of the opinions of academic commentators, the Supreme Court of the United States, parties to this proceeding, and others cited by the parties in the record of this proceeding, demonstrates that the question whether prices are below marginal cost, or its surrogate, average variable cost, is central to the determination of whether they are predatory. Disagreement exists on the point at which prices can be presumed legal, and on the role of intent in finding antitrust violations. n1047 In adopting average variable cost as a tariff review standard, we do not find that all rates which cover average variable costs are necessarily just and reasonable. Petitioners may be able to show that there is reason to investigate a rate decrease which we permit to go into effect after 45 days. Competitors can also file complaints alleging predatory pricing. In either case, it might be possible to show that the resulting rate is above average variable cost but nonetheless predatory using relevant antitrust analysis and precedent. n1048

n1046 See, e.g., *Further Notice*, 3 *FCC Rcd* at 3372, n.709, and cases cited therein; Areeda & Turner, *Predatory Pricing and Related Practices under Section 2 of the Sherman Act*, 88 *Harv. L. Rev.* 697 (1975); McGee, *Predatory Pricing Revisited*, 23 *J. Law & Econ.* 289 (1980); *Cargill Inc. v. Monfort of Colorado*, 479 *U.S.* 104, 117 n.12 (1986).

n1047 See *Cargill*, 479 *U.S.* at 117, n.12, comparing *Arthur S. Langenderfer, Inc. v. S. E. Johnson Co.*, 728 *F.2d* 1050, 1056-1057 (6th Cir.) cert. denied, 469 *U.S.* 1036 (1984), with *Transamerica Computer Co. v. International Business Machines Corp.*, 698 *F.2d* 1377 (9th Cir.), cert. denied, 464 *U.S.* 955 (1983).

n1048 Parties aggrieved by allegedly predatory pricing may also press their allegations in court under the antitrust laws.

501. The record in the instant proceeding does not provide us with a firm basis for specifying precisely what are the average variable costs of various telecommunications services. We do observe, however, that the average variable cost of any service must include all access charges and billing and collection



costs attributable to that service, as well as other non-fixed costs which would not be incurred if the service were not offered.

f. New and Restructured Services

i. Summary of Further Notice

502. In the Further Notice, we stated that new and restructured services present special considerations because of the opportunity they present to carriers to charge rates that otherwise would not be permitted under our price

[\*3116] cap rules. n1049 We found that while the offering of a new or restructured service potentially furthers our goal of increasing carrier innovation and cost-effectiveness, such an offering raises issues of rate discrimination as well as anticompetitive concerns. n1050 We tentatively concluded that it would be necessary to treat tariffs involving new and restructured services differently from tariffs that only specify rate level changes in order to discourage carriers from manipulating price cap regulation. n1051

n1049 3 FCC Rcd at 3320 (para. 232).

n1050 Id. at 3320-21 (para. 233).

n1051 Id. at 3321 (para. 234).

503. We tentatively concluded that an offering increasing customer options should be classified as new, while an offering that represents a change in an existing method of charging or provisioning, without increasing the range of alternatives, should be classified as restructured. n1052 We further concluded that new and restructured services presented different problems which required different treatment.

n1052 Id. at 3377 n.720 (para. 325).

504. We proposed that new services should initially be offered outside of price cap regulation, and incorporated into price caps in the first annual filing after the completion of the base year in which the service becomes effective. We tentatively concluded that carriers seeking to introduce a new service would be required to demonstrate that the service met a modified version of the "net revenue test" established in the Optional Calling Plan Order. n1053 We proposed that a new service must generate a net revenue increase within the lesser of the following time periods: 24 months after the effective date of the annual price cap tariff incorporating the new service, or 36 months from the date that the new tariff becomes effective. n1054 We tentatively concluded that the net revenue increase should be measured against revenues generated from services in the same price cap basket. n1055 In order

[\*3117] to afford adequate opportunity for review, we tentatively concluded that tariffs proposing new services should be filed on 45 days' notice. n1056

n1053 Id. at 3376 (para. 322) (citing Guidelines for Dominant Carriers' MTS Rates and Rate Structure Plans, CC Docket No. 84-1235, Memorandum Opinion and Order, 50 Fed. Reg. 42,945 (Oct. 23, 1985), 59 R.R.2d 70 (1985) (Optional

In the Matter of Policy and Rules Concerning Rates for  
Dominant Carriers, Part 1 of 3

CC Docket No. 87-313

FEDERAL COMMUNICATIONS COMMISSION

4 FCC Rcd 2873; 1989 FCC LEXIS 860; 66 Rad. Reg. 2d (P & F)  
372

RELEASE-NUMBER: FCC 89-91 37691

April 17, 1989 Released; Adopted March 16, 1989

ACTION:    [\*\*1]   REPORT and ORDER and SECOND FURTHER NOTICE  
                  of PROPOSED RULEMAKING

OPINION:

[\*2876]   By the Commission: Commissioners Patrick, Chairman; and Quello  
issuing separate statements; Commissioner Dennis concurring and issuing a  
statement at a later date.

E



ALL STATE LEGAL 800-222-0510 EDS11 RECYCLED

Before the  
Federal Communications Commission  
Washington, D.C. 20554

CC Docket No. 92-141

In the Matter of

GTE Telephone Operating Companies

Investigation of Transmittal Nos. 711 and 750  
Below-band Transport Rates

# MEMORANDUM OPINION AND ORDER

Adopted: December 23, 1994; Released: December 29, 1994

By the Commission:

## I. BACKGROUND

1. In its 1992 annual access tariff filing, the GTE Telephone Operating Companies (GTE) filed substantially reduced below-band rates for transport service in several GTE study areas.<sup>1</sup> Below-band filings must be accompanied by a showing that the rates will cover average variable costs (AVC), and are otherwise just, reasonable, and nondiscriminatory.<sup>2</sup>

2. Some of GTE's below-band transport rates were lowered to a level at or near the average variable cost reported in its study. GTE's average variable cost showing, however, consisted only of summary results of incremental cost studies. Consequently, in the 1992 *Annual Access Order*,<sup>3</sup> the Common Carrier Bureau concluded that GTE failed to adequately support its below-band transport rates, and suspended those rates for five months pending an investigation to ensure that they were not predatory.<sup>4</sup>

3. In order to evaluate the reasonableness of GTE's filing, the Common Carrier Bureau directed GTE to file a direct case on July 27, 1992. In its direct case, GTE was instructed to: 1) provide the full incremental cost studies supporting its AVC showing results, e.g., the type and cost of equipment used to provide transport and the amount of usage of the equipment; and 2) demonstrate that its rates are just, reasonable and nondiscriminatory. In addition, the Bureau designated two issues for resolution: (1) whether GTE's below band rates are above GTE's average variable costs; and (2) whether GTE's rates are otherwise just, reasonable and nondiscriminatory. In its direct case, GTE provided AVC studies for California, Florida, Southwest and GTE of Washington/Oregon/California-West Coast.

GTE's direct case included four components: (i) summary workpapers combining the various cost sub-elements into the total investment required for each rate element; (ii) detail workpapers showing the material, engineering and installation costs of the equipment used to build each specified cost sub-element; (iii) workpapers representing the original summarized AVC results as filed in GTE's 1992 annual access filing; and (iv) return and income tax calculation workpapers. GTE maintains that the rate reductions at issue cover their average variable costs and are otherwise just, reasonable and nondiscriminatory. See GTE Direct Case at 11-15.

4. The Association for Local Telecommunications Services (ALTS) filed an opposition to GTE's direct case on August 17, 1992. ALTS first argues that in resolving the designated issues, the Commission must ensure that all variable costs associated with providing GTE's switched transport services are recovered through the appropriate rate elements. ALTS Opposition at 3. In order to capture a reasonable representation of a LEC's variable cost, ALTS contends, the Commission must take into account the accelerated levels of new investment in fiber optic facilities by considering cost data over a "reasonable" period of time. *Id.* at 4. ALTS therefore requests that the Commission clarify that the AVC test requires an averaging of LEC investment data over the most recent five-year period to account for distortions caused by "lumpy investment." *Id.* at 1, 5.

5. In its reply to ALTS' opposition, filed August 24, 1992, GTE defends its rates as being a reasonable response to the competitive environment, and as fully consistent with the Commission's incentive regulation. GTE Reply at 2. See also GTE Direct Case at 14. According to GTE, it faces significant competition in the major metropolitan areas of Tampa, Los Angeles, Dallas and Seattle, and therefore appropriately selected these areas for rate reductions. *Id.* at 3.

6. GTE also defends the method it used to identify variable costs — the "snapshot" approach — which GTE defines as an analysis of cost structure and level (*i.e.*, amount of copper/fiber) on a "present day/present snapshot in time" basis — as a reasonable, conservative approach for capturing average variable costs. *Id.* at 4-5. GTE maintains that it is an accepted economic standard to view incremental cost on a forward looking basis. *Id.* at 5. Likewise, GTE disagrees with ALTS' position that the Commission should average investment data over the most recent five-year period. GTE argues that there is no legal or academic precedent for ALTS' view, and that a five year historical perspective of costs suggests embedded cost studies and abandoned methodologies such as fully distributed cost. GTE contends that ALTS' position thus departs from the policy and direction of incentive regulation. *Id.*

7. ALTS next contends that the "extraordinary" cost differentials asserted by GTE among its various service areas "strongly indicate" that GTE's direct case

<sup>1</sup> GTE filed below-band rates for GTE California, GTE Florida, GTE Southwest and GTE Washington/Oregon/California-West Coast. GTE Direct Case at 2.

<sup>2</sup> See Policy and Rules Concerning Rates for Dominant Carriers, Second Report and Order, 5 FCC Red 6760, 6814, (para. 226) and 6824 (paras. 309-311) (1990) (*LEC Price Cap Order*);

Policy and Rules Concerning Rates for Dominant Carriers, Order on Reconsideration, 6 FCC Red 2637, 2699 (para. 137) (*LEC Price Cap Reconsideration Order*).

<sup>3</sup> 1992 Annual Access Tariff Filings, CC Docket No. 92-141, 7 FCC Red 4734 (1992) (*1992 Annual Access Order*).

<sup>4</sup> These below-band rates became effective on December 15, 1992.

underreports the relevant costs in the four service areas under investigation.<sup>3</sup> ALTS also contends that GTE underreported the costs associated with transport termination by excluding whole categories of relevant costs associated with monitoring and testing switched circuits, as well as spare equipment.<sup>4</sup> Additionally, ALTS contends, GTE excluded the costs of equipment racks, power supplies and fuse panels. ALTS Opposition at 9. ALTS states that the costs of billing and collection, recordkeeping, marketing and order processing were also excluded by GTE in direct violation of the Commission's price cap rules. *Id.* at 10-11.

8. GTE replies that its AVC study provided sufficient cost detail to justify the reasonableness of the costs involved, and that aggregation at the lowest levels is not necessary to describe adequately the variable costs involved. GTE Reply at 6. Further, GTE states, many of the items ALTS claims were excluded from GTE's study were included, but not necessarily shown at the lowest detail. *Id.* For example, GTE asserts, GTE included alarm equipment, equipment racks, power supplies and fuse panels in the "CO Repeater Equipment" category, and accounted for spare equipment in part through the 90 percent circuit equipment and 75 percent outside plant utilization factors. *Id.* at 7-8.

9. Further, GTE argues, it also properly included all relevant costs (e.g., capital costs) and has treated expenses such as marketing, order processing, billing and collection, record keeping and other administrative expenses correctly in determining average variable costs. *Id.* at 9-10. GTE indicates however, that it need not include billing and collection expenses because they are *de minimis*, and is not required to allocate these expenses to the specific rate elements GTE is proposing to change. *Id.* at 10.

10. ALTS also argues that GTE allocated the costs associated with its tandem offices entirely to switched transport termination when such costs should have been allocated to switched transport facility, since the function of tandem offices increases transport efficiency. ALTS Opposition at 10. Further, ALTS assails GTE's methodology for determining output as vague, in that the application of network usage factors is not clarified. ALTS complains that the output is never quantified, and the methodology overstates GTE's output. *Id.* at 11-12.

11. GTE defends its decision to assign tandem costs to transport termination, rather than to the transport facility. GTE maintains that Part 69 of the Commission's Rules does not require tandem costs to be included in the facility element of the transport category, and states that LECs have the latitude to place these costs in either category, or to spread costs across both services in whatever manner

reasonable. Since access tandem expenses are not distance sensitive, GTE asserts, it has placed these costs in transport termination. GTE Reply at 9. In challenging its method of determining output, GTE states, ALTS incorrectly assumed a 100 percent fill factor, when GTE used a 90 percent circuit equipment fill factor and 75 percent outside plant fill factor in the cost studies. GTE provides Exhibit 3 to illustrate its use of these fill factors; GTE asserts that the exhibit shows that it did not overstate output or understate cost. *Id.* at 12.

12. Finally, ALTS maintains, GTE's proposed rates are otherwise unreasonable because the 70-80 percent rate cuts proposed by GTE raise barriers to entry by inducing extraordinary volatility into the market, and creating regulatory uncertainty. ALTS Opposition at 15-16. GTE argues that its rates are otherwise just and reasonable because price reductions alone do not prove predatory prices and because the Commission's price cap rules and other regulatory constraints assure that the GTEs cannot abuse their position in the market.<sup>5</sup> GTE Reply at 12.

## II. DISCUSSION

13. In both the *AT&T Price Cap Order*<sup>6</sup> and the *LEC Price Cap Order* the Commission expressed the clear sentiment that rate reductions are generally beneficial to consumers, and are more often than not undertaken for competitive reasons.<sup>7</sup> Moreover, the Commission has maintained the view that proven cases of predatory pricing are rare, that below-band reductions introduced under our price cap system will more likely be pro-competitive than predatory, and that the LEC service basket structure further lessens the already unlikely occurrence of predation. In both the *AT&T Price Cap Order* and the *LEC Price Cap Order* the Commission found that average variable cost is central to determining whether prices are predatory for tariff review purposes.<sup>8</sup>

14. This investigation was prompted by a lack of clarity in GTE's cost support that prevented the Bureau from determining whether GTE's rates were so low as not to be just, reasonable and nondiscriminatory. Our decision in this investigation therefore needs to focus on whether those rates are predatory. In making this determination, we believe we should place great weight on whether GTE passes the average variable cost standard established in the price cap rules for tariff review of below band filings. That standard was designed as a check against predation, and is drawn from federal circuit court decisions in antitrust cases.<sup>11</sup>

<sup>3</sup> ALTS states that GTE's proposed premium transport termination charge for California would be set at 84 percent below GTE's Montana rates, 76 percent below its Michigan rates, 72 percent below its Illinois rates, and 55 percent below its Pennsylvania rates. *Id.* at 7.

<sup>4</sup> ALTS states that the combined cost of test and spare equipment is significant and attaches, as an example, a page from Illinois Bell's Intrastate Optical Interconnection Service tariff, which shows that the total charges for its test and spare equipment amount to almost one-third of the entire variable cost GTE reports for a fiber-based special access line termination. *Id.* at 1, 8-9.

<sup>5</sup> On September 30, 1992, ALTS filed a pleading captioned "Ex Parte Filing" responding to GTE's reply. GTE filed an opposi-

tion and motion to strike ALTS' pleading as unauthorized and untimely on October 5, 1992; ALTS filed an opposition to the motion to strike dated October 13, 1992. We will accept ALTS' filing as a permissible *ex parte* presentation. See 47 C.F.R. § 1.120b. Nothing in this filing leads us to reach a different result.

<sup>6</sup> Policy and Rules Concerning Rates for Dominant Carriers, Report and Order and Second Further Notice, 4 FCC Red 2873 (1989) and Erratum, 4 FCC Red 3379 (1989).

<sup>7</sup> See *AT&T Price Cap Order*, 4 FCC Red at 3114 (para. 499); *LEC Price Cap Order*, 5 FCC Red at 6824 (para. 309).

<sup>8</sup> See *AT&T Price Cap Order*, 4 FCC Red at 3114-15 (paras. 499-500); *LEC Price Cap Order*, 5 FCC Red at 6824 (paras. 309-311).

<sup>11</sup> *AT&T Price Cap Order* at 3114-3115.

15. In the price cap orders, the Commission specified certain types of costs which must be included in the calculation of the cost floor. The Commission stated that at a minimum, variable costs should include all access charges and billing and collection costs attributable to the service, as well as other non-fixed costs which would not be incurred if the service were not offered.<sup>12</sup> AVC showings submitted in the past<sup>13</sup> have had the following characteristics: (1) for the service in question, the unit costs of plant investment,<sup>14</sup> network maintenance and operations, and customer operations, as well as other costs specified in the price cap orders, were included in the calculation of the cost floor; and (2) such costs were "forward-looking," i.e., costs that a new service provider seeking to offer ongoing service for a reasonable duration would face in the market today. Forward-looking costs are based on current and anticipated prices, not embedded costs, and are based on a service configuration embodying state of the art technology.<sup>15</sup>

16. GTE has developed its costs using a method similar to that outlined above.<sup>16</sup> One major difference is that GTE used a "snapshot" approach to capture the costs of its current network, thereby including more embedded (copper) facilities than would be included if the transport facility were built today. Since the cost of copper facilities exceeds that of fiber optic facilities which would predominate in the future, calculations more heavily weighted toward copper result in a higher AVC cost floor than under the method outlined above. Since GTE can show that its prices exceed the higher AVC cost floor, GTE's variation in method does not invalidate its AVC showing.<sup>17</sup> Another difference is that contrary to the Commission's direction in the *AT&T Price Cap Order*, GTE did not include billing and collection costs in the rate elements it proposes modifying. GTE has recalculated its AVC including billing and collection costs and has shown that in each study area except for Florida its proposed rates exceed AVC.<sup>18</sup> GTE has refilled its Florida rates to raise them above the recalculated AVC.<sup>19</sup>

17. GTE has demonstrated that its costs meet or exceed its average variable cost, and has thus made the showing required for below-band rates. GTE has also adequately addressed ALTS' allegations that GTE underreported costs and overestimated service output.<sup>20</sup> In addition, there is nothing else in the record to support a conclusion that

GTE's rates are otherwise unreasonable or unreasonably discriminatory. Accordingly, we find that GTE's rates are lawful.

### III. ORDERING CLAUSES

18. Accordingly, IT IS ORDERED that the investigation of GTE's below band transport rates initiated by the Common Carrier Bureau in the 1992 *Annual Access Order* IS TERMINATED.

19. IT IS FURTHER ORDERED that GTE's motion to strike ALTS' "Ex Parte Filing" IS DENIED.

### FEDERAL COMMUNICATIONS COMMISSION

William F. Caton  
Acting Secretary

<sup>12</sup> See e.g., *AT&T Price Cap Order*, 4 FCC Red at 3115 (1989).

<sup>13</sup> See e.g., *AT&T Communications Tariff* F.C.C. No. 1, Transmittal No. 2777, effective January 1, 1991; *AT&T Communications Tariff* F.C.C. No. 1, Transmittal No. 2717, effective December 30, 1990; and *AT&T Communications Tariff* F.C.C. No. 1, Transmittal No. 2661, effective December 8, 1991.

<sup>14</sup> Such costs would include "capital costs," i.e., depreciation expense, net return, and relevant taxes. See Alfred E. Kahn, *The Economics of Regulation: Principles and Institutions*, Vol. 1 at 32-36 (1970).

<sup>15</sup> "For it is current and anticipated cost, rather than historical cost, that is relevant to business decisions to enter markets and price products. . . . The historical costs associated with the plant already in place are essentially irrelevant to this decision since those costs are 'sunk' and unavoidable and are unaffected by a new production decision." *MCI Communications Corporation v. American Telephone and Telegraph Company*, 708 F.2d 1081,

1116-17 (7th Cir. 1983). For this reason, we reject ALTS' suggestion that a LEC average its investment over the most recent five year period.

<sup>16</sup> GTE provided its billing and collection costs for the affected switched access rates in an *Ex Parte* letter filed October 21, 1992.

<sup>17</sup> We note that GTE made a number of assumptions (such as average distance of the transport facility and the rounding up of the percent of fiber) which have the effect of lowering the reported average variable cost. In general, however, it appears that the effect of these assumptions is more than offset by the overall conservative nature of GTE's study methodology (e.g., the inclusion of copper facilities in determining the cost of its network).

<sup>18</sup> See note 15, *supra*, C.

<sup>19</sup> *GTE Tariff* F.C.C. No. 1, Transmittal No. 750, filed October 30, 1992. These rates became effective December 15, 1992.

<sup>20</sup> See paras. 8, 9, and 11 *supra*.



FCC 96-325

Before the  
Federal Communications Commission  
Washington, DC 20554

In the Matter of

Implementation of the Local Competition  
Provisions in the Telecommunications Act  
of 1996

CC Docket No. 96-98

Interconnection between Local Exchange  
Carriers and Commercial Mobile Radio  
Service Providers

CC Docket No. 95-185

**FIRST REPORT AND ORDER**

Adopted: August 1, 1996

Released: August 8, 1996

By the Commission: Chairman Hundt and Commissioners Quello, Ness, and Chong issuing  
separate statements.

**Table of Contents**

<b>I. INTRODUCTION, OVERVIEW, AND EXECUTIVE SUMMARY</b>	<b>1</b>
A. The Telecommunications Act of 1996 - A New Direction	1
B. The Competition Trilogy: Section 251, Universal Service Reform and Access Charge Reform	6
C. Economic Barriers	10
D. Operational Barriers	16
E. Transition	21
F. Executive Summary	24
<b>II. SCOPE OF THE COMMISSION'S RULES</b>	<b>41</b>
A. Advantages and Disadvantages of National Rules	44
B. Suggested Approaches for FCC Rules	63
C. Legal Authority of the Commission to Establish Regulations Applicable to Intrastate Aspects of Interconnection, Resale of Services, and Unbundled Network Elements	69



displaced facilities for other purposes. Overall, we think that these factors can and should be captured in any LRIC model and therefore we do not agree that this requires a departure from the general principle of forward-looking cost-based pricing for network elements.

688. We are not persuaded by USTA's argument that forward looking methodologies fail to adjust the cost of capital to reflect the risks associated with irreversible investments and that they are "biased downward by a factor of three." First, USTA's argument unrealistically assumes that competitive entry would be instantaneous. The more reasonable assumption of entry occurring over time will reduce the costs associated with sunk investment. Second, we find it unlikely that investment in communications equipment is entirely irreversible or that such equipment would become valueless once facilities-based competition begins. In a growing market, there most likely would be demand for at least some embedded telecommunications equipment, which would therefore retain its value. Third, contractual arrangements between the new entrant and the incumbent that specifically address USTA's concerns and protect incumbent's investments during transition can be established.

689. Finally we are not persuaded that the use by firms of hurdle rates that exceed the market cost of capital is convincing evidence that sunk investments significantly increase a firm's cost of capital. An alternative explanation for this phenomenon is that the process that firms use to choose among investment projects results in overestimates of their returns. Firms therefore use hurdle rates in excess of the market cost of capital to account for these overestimates.<sup>1692</sup>

690. *Summary of TELRIC Methodology.* The following summarizes our conclusions regarding setting prices of interconnection and access to unbundled network elements based on the TELRIC methodology for such elements. The increment that forms the basis for a TELRIC study shall be the entire quantity of the network element provided. As we have previously stated, all costs associated with the providing the element shall be included in the incremental cost. Only forward-looking, incremental costs shall be included in a TELRIC study. Costs must be based on the incumbent LEC's existing wire center locations and most efficient technology available.

691. Any function necessary to produce a network element must have an associated cost. The study must explain with specificity why and how specific functions are necessary to provide network elements and how the associated costs were developed. Only those costs that are incurred in the provision of the network elements in the long run shall be directly

---

<sup>1692</sup> See Richard Thaler, *The Winner's Curse*, 2 J. Econ. Perspectives 201 (1988); Keith Brown, *Note on the Apparent Bias of Net Revenue Estimates for Capital Investment Projects*, 29 J. Fin. 1215-16 (1974); Daniel Kahneman and Daniel Lovallo, *Timid Choices, Bold Forecasts*, 39 Management Science 17, 28 (1993). In addition, we note that Hausman's arguments that TSLRIC method underestimate the true cost of an element apply only to the capital expense associated with an element and not to the operating expense.

attributable to those elements. Costs must be attributed on a cost-causative basis. Costs are causally-related to the network element being provided if the costs are incurred as a direct result of providing the network elements, or can be avoided, in the long run, when the company ceases to provide them. Thus, for example, the forward-looking costs of capital (debt and equity) needed to support investments required to produce a given element shall be included in the forward-looking direct cost of that element. Directly attributable costs shall include costs such as certain administrative expenses, which have traditionally been viewed as common costs, if these costs vary with the provision of network elements. Retailing costs, such as marketing or consumer billing costs associated with retail services, are not attributable to the production of network elements that are offered to interconnecting carriers and must not be included in the forward-looking direct cost of an element.

692. In a TELRIC methodology, the "long run" used shall be a period long enough that all costs are treated as variable and avoidable.<sup>1693</sup> This "long run" approach ensures that rates recover not only the operating costs that vary in the short run, but also fixed investment costs that, while not variable in the short term, are necessary inputs directly attributable to providing the element.

693. States may review a TELRIC economic cost study in the context of a particular arbitration proceeding, or they may conduct such studies in a rulemaking and apply the results in various arbitrations involving incumbent LECs. In the latter case, states must replace any interim rates<sup>1694</sup> set in arbitration proceedings with the permanent rate resulting from the separate rulemaking. This permanent rate will take effect at or about the time of the conclusion of the separate rulemaking and will apply from that time forward.

694. *Forward-Looking Common Costs.* Certain common costs are incurred in the provision of network elements. As discussed above, some of these costs are common to only a subset of the elements or services provided by incumbent LECs. Such costs shall be allocated to that subset, and should then be allocated among the individual elements or services in that subset, to the greatest possible extent. For example, shared maintenance facilities and vehicles should be allocated only to the elements that benefit from those facilities and vehicles. Common costs also include costs incurred by the firm's operations as a whole, that are common to all services and elements (e.g., salaries of executives involved in overseeing all activities of the business), although for the purpose of pricing interconnection and access to unbundled elements, which are intermediate products offered to competing carriers, the relevant common costs do not include billing, marketing, and other costs

---

<sup>1693</sup> See 1 Alfred E. Kahn *The Economics of Regulation: Principles and Institutions* 70-71 (1988).

<sup>1694</sup> See *infra*, Section VII.C., discussing default proxy price ceilings and ranges.

attributable to the provision of retail service.<sup>1695</sup> Given these common costs, setting the price of each discrete network element based solely on the forward-looking incremental costs directly attributable to the production of individual elements will not recover the total forward-looking costs of operating the wholesale network.<sup>1696</sup> Because forward-looking common costs are consistent with our forward-looking, economic cost paradigm, a reasonable measure of such costs shall be included in the prices for interconnection and access to network elements.

695. The incumbent LECs generally argue that common costs are quite significant,<sup>1697</sup> while several other parties maintain that these amounts are minimal.<sup>1698</sup> Because the unbundled network elements correspond, to a great extent, to discrete network facilities, and have different operating characteristics, we expect that common costs should be smaller than the common costs associated with the long-run incremental cost of a service. We expect that many facility costs that may be common with respect to the individual services provided by the facilities can be directly attributed to the facilities when offered as unbundled network elements. Moreover, defining the network elements at a relatively high level of aggregation, as we have done,<sup>1699</sup> should also reduce the magnitude of the common costs. A properly conducted TELRIC methodology will attribute costs to specific elements to the greatest possible extent, which will reduce the common costs. Nevertheless, there will remain some common costs that must be allocated among network elements and interconnection services. For example, at the sub-element level of study (*e.g.*, identifying the respective costs of 2-wire loops, 4-wire loops, ISDN loops, and so on), common costs may be a significant proportion of all the costs that must be recovered from sub-elements. Given the likely asymmetry of information regarding network costs, we conclude that, in the arbitration process, incumbent LECs shall have the burden to prove the specific nature and magnitude of these forward-looking common costs.

696. We conclude that forward-looking common costs shall be allocated among elements and services in a reasonable manner, consistent with the pro-competitive goals of the

---

<sup>1695</sup> See *infra*, Section VIII.B., describing "avoided costs" in the resale context.

<sup>1696</sup> See, *e.g.*, AT&T comments at 61-66; Teleport comments at 47-48.

<sup>1697</sup> See, *e.g.*, PacTel reply at 27-28; see also Cincinnati Bell reply at 10; USTA comments at Attachment 1 (Affidavit of Jerry A. Hausman), p.4 n.1.

<sup>1698</sup> See, *e.g.*, Competition Policy Institute comments at 19; MCI comments at 66; Texas Public Utility Counsel comments at 24.

<sup>1699</sup> See *supra*, Section V., discussing unbundling requirements.

1996 Act. One reasonable allocation method would be to allocate common costs using a fixed allocator, such as a percentage markup over the directly attributable forward-looking costs. We conclude that a second reasonable allocation method would allocate only a relatively small share of common costs to certain critical network elements, such as the local loop and collocation, that are most difficult for entrants to replicate promptly (*i.e.*, bottleneck facilities). Allocation of common costs on this basis ensures that the prices of network elements that are least likely to be subject to competition are not artificially inflated by a large allocation of common costs. On the other hand, certain other allocation methods would not be reasonable. For example, we conclude that an allocation methodology that relies exclusively on allocating common costs in inverse proportion to the sensitivity of demand for various network elements and services may not be used.<sup>1700</sup> We conclude that such an allocation could unreasonably limit the extent of entry into local exchange markets by allocating more costs to, and thus raising the prices of, the most critical bottleneck inputs, the demand for which tends to be relatively inelastic. Such an allocation of these costs would undermine the pro-competitive objectives of the 1996 Act.

697. We believe that our treatment of forward-looking common costs will minimize regulatory burdens and economic impact for all parties involved in arbitration of agreements for interconnection and access to unbundled elements, and will advance the 1996 Act's pro-competitive objectives for local exchange and exchange access markets.<sup>1701</sup> In our decisionmaking, we have considered the economic impact of our rules in this section on small incumbent LECs. For example, although opposed to the use of a forward-looking, economic cost methodology, small incumbent LECs favor the recovery of joint and common costs in the event the Commission adopts forward-looking cost methodology. We are adopting such an approach. Moreover, the cost-based pricing methodology that we are adopting is designed to permit incumbent LECs to recover their economic costs of providing interconnection and unbundled elements, which may minimize the economic impact of our decisions on incumbent LECs, including small incumbent LECs. We also note that certain small incumbent LECs are not subject to our rules under section 251(f)(1) of the 1996 Act, unless otherwise determined by a state commission, and certain other small incumbent LECs may seek relief from their state commissions from our rules under section 251(f)(2) of the 1996 Act.<sup>1702</sup>

---

<sup>1700</sup> See Frank P. Ramsey, *A Contribution to the Theory of Taxation*, 37 Econ. J. 47 (1927); see generally Kenneth E. Train, *Optimal Regulation: The Economic Theory of Natural Monopoly* 115-40 (1992) (discussing efficiency properties of Ramsey prices); Bridger M. Mitchell & Ingo Vogelsang, *Telecommunications Pricing: Theory and Practice* 43-61 (1991). The sensitivity of demand is measured by the elasticity of demand, which is defined as the percentage change in the quantity of a service demanded for a one per cent change in price.

<sup>1701</sup> See Regulatory Flexibility Act, 5 U.S.C. §§ 601 *et seq.*

<sup>1702</sup> 47 U.S.C. § 251(f).

698. We further conclude that, for the aggregate of all unbundled network elements, incumbent LECs must be given a reasonable opportunity to recover their forward-looking common costs attributable to operating the wholesale network. In no instance should prices exceed the stand-alone cost for a specific element, and in most cases they should be below stand-alone costs. Stand-alone costs are defined as the forward-looking cost that an efficient entrant would incur in providing a given element or any combination of elements. No price higher than stand-alone cost could be sustained in a market from which entry barriers were completely absent. Where there are few common costs, there is likely to be only a minimal difference between the forward-looking costs that are directly attributable to the particular element, which excludes these costs, and stand-alone cost, which includes all of them. Network elements should not, however, be priced at levels that would enable the incumbent LEC to recover the same common costs multiple times from different elements. Any multiple recovery would be unreasonable and thus in violation of the statutory standard. Further, we note that the sum of the direct costs and the forward-looking common costs of all elements will likely differ from the incumbent LEC's historical, fully distributed costs.

699. *Reasonable Return on Investment and "Profit."* Section 252(d)(1) states that rates for interconnection and access to unbundled elements "may include a reasonable profit."<sup>1703</sup> We find that the TELRIC pricing methodology we are adopting provides for such a reasonable profit and thus no additional profit is justified under the statutory language. We note there are two types of profit. First, in plain English, profit is defined as "the excess of returns over expenditure in a transaction or a series of transactions."<sup>1704</sup> This is also known as a "normal" profit, which is the total revenue required to cover all of the costs of a firm, including its opportunity costs.<sup>1705</sup> Second, there is "economic" profit, which is any return in excess of normal profit.<sup>1706</sup> Thus, for example, if the normal return in an industry is 10 percent and a firm earns a return of 14 percent, the economic profit for that firm is 4 percent. Economic is also referred to as "supranormal" profit. We conclude that the definition of "normal" profit is embodied in "reasonable profit" under Section 252(d)(1).

700. The concept of normal profit is embodied in forward-looking costs because the forward-looking cost of capital, *i.e.*, the cost of obtaining debt and equity financing, is one of the forward-looking costs of providing the network elements. This forward-looking cost of capital is equal to a normal profit. We conclude that allowing greater than normal profits

---

<sup>1703</sup> 47 U.S.C. § 252(d)(1).

<sup>1704</sup> *Webster's New Collegiate Dictionary* 931 (10th ed. 1994).

<sup>1705</sup> See David W. Pearce, *The MIT Dictionary of Modern Economics* (1994) at 310.

<sup>1706</sup> *Id.* at 415.

would not be "reasonable" under sections 251(c) and 252(d)(1).<sup>1707</sup> Thus, contrary to the arguments put forth by several incumbent LECs, we find that adding an additional measure of profit to the risk-adjusted cost of capital<sup>1708</sup> in setting the prices for interconnection and access to unbundled elements would violate the requirements of sections 251(c) and 252(d)(1) of the 1996 Act.

701. Possible accounting losses from the sale of interconnection and unbundled network elements using a reasonable forward-looking cost-based methodology do not necessarily indicate that incumbent LECs are being denied a "reasonable profit" under the statute. The use of a forward-looking, economic, cost-based pricing methodology, including a reasonable allocation of legitimate joint and common costs, will permit incumbent LECs the opportunity to earn a reasonable return on their investment in network elements. Finally, contrary to PacTel's argument, and as discussed below in detail, we conclude that our forward-looking cost-based pricing methodology is consistent with the Fifth Amendment and is not confiscatory.

---

<sup>1707</sup> We note that our interpretation is consistent with existing Supreme Court precedent concerning what constitutes a reasonable rate of return for a regulated public utility. For example, in *Bluefield Water Works*, the Court stated:

A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures.

*Bluefield Water Works & Improvement Co. v. Public Service Comm'n of West Virginia*, 262 U.S. 679, 692-93 (1923). Similarly, in *FPC v. Hope Natural Gas*, the Court stated:

... it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. . . By that standard the return to the equity owner should be commensurate with risks on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.

*Federal Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944) (*Hope Natural Gas*). Cf., Charles F. Phillips, Jr., *The Economics of Regulation* 260 (Rev. ed. 1965) ("... a regulated company must be afforded the opportunity not only of assuring its financial integrity so that it can maintain its credit standing and attract additional capital as needed, but also for earnings comparable to those of other companies having corresponding risks.").

<sup>1708</sup> See *supra*, this Section, for a discussion of risk-adjusted cost of capital.

702. Based on the current record, we conclude that the currently authorized rate of return at the federal or state level is a reasonable starting point for TELRIC calculations, and incumbent LECs bear the burden of demonstrating with specificity that the business risks that they face in providing unbundled network elements and interconnection services would justify a different risk-adjusted cost of capital or depreciation rate. These elements generally are bottleneck, monopoly services that do not now face significant competition. We recognize that incumbent LECs are likely to face increased risks given the overall increases in competition in this industry, which generally might warrant an increased cost of capital, but note that, earlier this year, we instituted a preliminary inquiry as to whether the currently authorized federal 11.25 percent rate of return is too high given the current marketplace cost of equity and debt.<sup>1709</sup> On the basis of the current record, we decline to engage in a time-consuming examination to determine a new rate of return, which may well require a detailed proceeding. States may adjust the cost of capital if a party demonstrates to a state commission that either a higher or lower level of cost of capital is warranted, without that commission conducting a "rate-of-return or other rate based proceeding."<sup>1710</sup> We note that the risk-adjusted cost of capital need not be uniform for all elements. We intend to re-examine the issue of the appropriate risk-adjusted cost of capital on an ongoing basis, particularly in light of the state commissions' experiences in addressing this issue in specific situations.

703. We disagree with the conclusion that, when there are mostly sunk costs, forward-looking economic costs should not be the basis for pricing interconnection elements. The TELRIC of an element has three components, the operating expenses, the depreciation cost,<sup>1711</sup> and the appropriate risk-adjusted cost of capital. We conclude that an appropriate calculation of TELRIC will include a depreciation rate that reflects the true changes in economic value of an asset and a cost of capital that appropriately reflects the risks incurred by an investor. Thus, even in the presence of sunk costs, TELRIC-based prices are an appropriate pricing methodology.

---

<sup>1709</sup> See *Common Carrier Bureau Sets Pleading Schedule in Preliminary Rate of Return Inquiry*, Public Notice, 11 FCC Rcd 3651 (Com. Car. Bur. 1996).

<sup>1710</sup> 47 U.S.C. § 252(d)(1)(A)(i).

<sup>1711</sup> Depreciation is the method of recognizing as an expense the cost of a capital investment. Properly calculated economic depreciation is a periodic reduction in the book value of an asset that makes the book value equal to its economic or market value.

G



## EX PARTE OR LATE FILED

U S WEST, Inc.  
1020 Nineteenth Street NW  
Suite 700  
Washington, DC 20036  
202 429-3120  
fax: 202 293-0561

Melissa Newman  
Executive Director - Federal Regulatory

**USWEST****RECEIVED****APR 08 1999****FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY****EX PARTE**

April 7, 1999

Tamara Preiss, Esquire  
Competitive Pricing Division  
Common Carrier Bureau  
Federal Communications Commission  
445 - 12<sup>th</sup> Street, SW, Room 5A207  
Washington, DC 20554

Re: Petition of U S WEST Communications, Inc. for Forbearance  
from Regulation as a Dominant Carrier for High Capacity Services  
in the Phoenix, Arizona MSA, CC Docket No. 98-157

Petition of U S WEST Communications, Inc. for Forbearance from  
Regulation as a Dominant Carrier for High Capacity Services in the  
Seattle, Washington MSA, CC Docket No. 99-1

Dear Ms. Preiss:

Over the last couple of months various representatives of U S WEST have met with you and other Federal Communications Commission ("Commission") Staff to discuss U S WEST Communications, Inc.'s ("U S WEST") petitions requesting that the Commission forbear from regulating it as a dominant provider of high capacity (i.e., DS1 and above) special access and dedicated transport for switched access services ("high capacity services") in the Phoenix, Arizona and Seattle, Washington MSAs filed on August 24, 1998 and December 30, 1998, respectively. In those meetings, several questions arose with respect to the petitions and the level of regulation that U S WEST faces in Arizona and Washington. U S WEST was asked to submit additional information in order to assist the Commission Staff in evaluating U S WEST's requests for regulatory relief. This letter is an effort to continue to respond to the Staff's information requests. Additional information will be submitted as soon as it is available.

Tamara Preiss, Esquire  
April 7, 1999  
Page 2

I have enclosed the following attachments to assist the Staff in its review:

- Attachment 1 shows representative situations where U S WEST was able to participate in intrastate competitive bid situations due to the flexibility afforded by the states.
- Attachment 2 analyzes the revenue potential within 100 feet of the competitive fiber. This revenue potential is very attractive to competitors.
- Attachment 3 provides an assessment of the interstate pricing history for high capacity services. Because it had very low prices U S WEST made use of volume and term discounts in lieu of lowering rates or using zone pricing.
- Attachment 4 shows the Arizona and Washington UNE prices.
- Attachment 5 shows the intrastate pricing history for DS1 and DS3 services in Arizona and Washington.

Acknowledgment and date of receipt of this transmittal are requested. A duplicate of this letter is attached for this purpose.

Please call if you have any questions.

Sincerely,

*Nicholas Neuman*

Attachments

**U S WEST**  
**High Capacity Forbearance**

## Attachment 1

### Intrastate Contracting Capability

One of the major benefits for customers from the forbearance U S WEST is seeking in Phoenix and Seattle is the ability to make competitive bids and enter into contracts. Representative examples of opportunities in which U S WEST was able to participate and give the customer additional competitive choices were:

**January 1997** A State of Washington K-20 Educational Telecommunications Network bid for DS1 and DS3. Competitors included AT&T and MCI.

January 1999	State of Oregon bid for Centrex, Analog Voice Grade and DS1. Competitors included AT&T and GTE.
--------------	---

November 1998	State of Arizona (state agencies, hospitals and schools) bid for DSS, Analog, and DS1. Competitive bids were involved.
---------------	--

February 1999 Utah Education Network requested bids for DS1, DS3, SST and SRS services. To compete with AT&T and MCI WorldCom, U S WEST proposed a service package that offered the customer more favorable terms and conditions.

Intrastate contracts typically can be negotiated on an Individual Case Basis without filing associated tariffs. Margin requirements, strategic fit and competitive forces drive the pricing and packaging decisions. Intrastate agreements provide U S WEST the flexibility it needs to customize the bid to best meet the need of customer.

**U S WEST**  
**High Capacity Forbearance**

**Attachment 2**

**Revenue Potential within 100 Feet**

In response to a question regarding the attraction for CLECs/CAPs to extend their service to customers within 100 feet of their fibers in the Phoenix MSA, the revenue potential is estimated to be \$30 million per year for the revenues from just the High Capacity services. If all of the potential revenues (e.g., local, toll, custom calling, etc.) are included the revenue raises to approximately \$50 million per year. These revenue estimates are not precise but do give an idea that the customers within 100 feet of the competitive fibers are a very attractive segment of the market.

When these revenue numbers are compared to the estimated cost to construct, which is \$28 million from the POWER model for locations within 100 feet; the situation is very attractive for the competitors to try to capture as much of this business as possible. The respective investment per revenue ratio is below unity (28/50). As explained in the Kahn and Tardiff paper attached to the Phoenix petition, ratios this small are much less than the overall ratio (3.2) which USWC has for Arizona and are very indicative of a very attractive market.

If the competitors are able to attract only a portion the business, say 50 % (\$15 million) of just the High Capacity services; the ratio is two (28/15), still less than the existing USWC ratio. Customers within 100 feet of the competitive fiber comprise a very attractive opportunity.

**U S WEST**  
**High Capacity Forbearance**

Attachment 3

**Interstate Prices**

For the last few years the month-to-month prices for the various interstate DS1 and DS3 services have essentially remained flat. The headroom that was present in the early nineties has evaporated with the ever-increasing productivity factor. In the early stages of Price Caps, U S WEST had some of the lowest prices<sup>1</sup> for High Capacity services among the ILECs. Considering that competitors were pricing 15-to 20% below U S WEST (umbrella pricing), U S WEST did not see the benefit of lowering monthly prices further. During this time, U S WEST continued to tariff several volume and term plans which gave the benefit of lower prices in exchange for the commitment to purchase a number of services over a specific period of time. Volume and term discounts are as high as 20%. Through these volume and term plans, the net price for the services has declined.

Because volume and term plans are initially tariffed as new services under the Price Cap rules, they do not generate headroom. They are initially filed outside of Price Caps and then come under Price Caps at the Annual Filing following the year in which they were tariffed. When they come under Price Caps, they come in as new rate elements, not as reduced rates for existing rate elements. The customers receive the benefit of the volume and term prices but headroom is not generated under the Price Cap formulas.

U S WEST has made limited use of zone pricing, but found it to be of limited benefit in a competitive environment. Competition does not develop uniformly across a zone. Competitors target key customers and buildings that exhibit the greatest revenue potential. The current zone density pricing rules do not allow U S WEST to address specific customer needs for customized pricing or to respond to initiatives of competitors.

<sup>1</sup> Even after Price Caps had existed for awhile, USW still had some of the lowest rates. Of the eight largest ILECs (Ameritech, Bell Atlantic, Bell South, NYNEX, Pacific Bell, GTE and USW) a comparison of the rates from the 1997 Annual Filing shows:

<u>Rate element</u>	<u>Range of rates</u>	<u>USW rate</u>	<u>Average rate</u>
DS1 Chan Term	\$325 to \$115	\$115	\$185
DS1 Mux	\$418 to \$180	\$218	\$250
DS1 Fix Mileage 0-8	\$90 to \$35	\$87	\$64
DS1 Var Mileage 0-8	\$25 to \$5	\$14	\$17
DS1 CT, Mux, 1 Mile	\$704 to \$409	\$433	\$515
DS3 Chan Term	\$3080 to \$1150	\$1350	\$1969
DS3 Mux	\$950 to \$115	\$255	\$500
DS3 Fix Mileage 0-8	\$1500 to \$263	\$310	\$671
DS3 Var Mileage 0-8	\$200 to \$27	\$43	\$114
DS3 CT, Mux, 1 Mile	\$4685 to \$1834	\$1958	\$3255

**U S WEST  
High Capacity Forbearance**

Attachment 4

**State UNE Pricing**

Arizona:

	<u>Monthly Fixed</u>	<u>Monthly Per Mile</u>	<u>Non-Recurring</u>
<b>Unbundled Dedicated Interoffice Transport (UDIT)</b>			
<b>DS1 UDIT</b>			<b>\$302.91</b>
DS1 0 to 8 Miles	\$35.98	\$0.65	
DS1 Over 8 to 25 Miles	\$35.99	\$0.94	
DS1 Over 25 to 50 Miles	\$36.00	\$1.75	
DS1 Over 50 Miles	\$36.00	\$1.59	
<b>DS3 UDIT</b>			<b>\$302.91</b>
DS3 0 to 8 Miles	\$243.17	\$13.32	
DS3 Over 8 to 25 Miles	\$246.15	\$15.90	
DS3 Over 25 to 50 Miles	\$250.66	\$22.91	
DS3 Over 50 Miles	\$249.26	\$22.49	
<b>Entrance Facilities</b>			
DS1	\$89.42		\$256.87
DS3	\$357.16		\$256.87
<b>Multiplexing</b>			
DS3 to DS1	\$196.85		\$2,281.44
DS1 to DS0	\$200.08		\$230.93
DS1/DS0 Low Side Channelization	\$6.08		\$231.47
<b>Unbundled Network Elements (UNEs)</b>			
4-Wire Non-Loaded Loop	\$22.90		varies by installation option
DS1 Capable Loop	\$89.42		varies by installation option

**U S WEST**  
**High Capacity Forbearance**

**Attachment 4**

**State UNE Pricing**

Washington:

**Unbundled Dedicated  
Interoffice Transport (UDIT)**

**DS1 UDIT**

DS1 0 to 8 Miles

\$39.08

\$0.60

under development

DS1 Over 8 to 25 Miles

\$39.08

\$0.76

DS1 Over 25 to 50 Miles

\$39.10

\$2.72

DS1 Over 50 Miles

\$39.10

\$3.19

**DS3 UDIT**

DS3 0 to 8 Miles

\$265.17

\$12.51

under development

DS3 Over 8 to 25 Miles

\$265.98

\$13.63

DS3 Over 25 to 50 Miles

\$272.68

\$35.81

DS3 Over 50 Miles

\$275.10

\$40.95

**Multiplexing**

DS3 to DS1

\$200.70

\$304.78

DS1 to DS0

\$206.78

\$297.13

DS1/DS0 Low Side Channelization

under development

**Unbundled Network  
Elements (UNEs)**

4-Wire Non-Loaded Loop

\$41.93

varies by installation option

DS1 Capable Loop

\$90.50

varies by installation option

# U S WEST High Capacity Forbearance

Attachment 5

## State Pricing History

### DS1 - Washington

4/1/89		6/25/1993 to Present							
		M-T-M	1-yr	2-yr	3-yr	4-yr	5-yr	6-yr	7-yr
NAC or CT	199.95	150.00	150.00	141.00	133.95	126.90	119.85	109.98	108.58
Mileage:									
Fixed 0-8	269.45	73.86	73.86	73.86	73.86	73.86	73.86	73.86	73.86
Per Mi 0-8	11.00	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04
Fixed 8-25	283.05	74.22	74.22	74.22	74.22	74.22	74.22	74.22	74.22
Per Mi 8-25	11.40	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86
Fixed 25-50	305.95	74.81	74.81	74.81	74.81	74.81	74.81	74.81	74.81
Per Mi 25-50	12.00	2.65	2.65	2.65	2.65	2.65	2.65	2.65	2.65
Fixed >50	400.70	77.43	77.43	77.43	77.43	77.43	77.43	77.43	77.43
Per Mi >50	14.65	2.86	2.86	2.86	2.86	2.86	2.86	2.86	2.86
Term Discount									
1-Year	15%								
3-Years	20%								
5-Years	20%								

### DS1 - Arizona

4/1/89		6/25/1993 to Present							
		M-T-M	1-yr	2-yr	3-yr	4-yr	5-yr	6-yr	7-yr
NAC or CT	189.95	150.00	141.00	133.95	126.90	119.85	109.98	109.28	108.57
Mileage:									
Fixed 0-8	269.45	150.00	141.00	133.95	126.90	119.85	109.98	109.28	108.57
Per Mi 0-8	11.00	11.00	10.25	9.74	9.23	8.71	8.00	7.94	7.89
Fixed 8-25	283.05	200.00	179.50	170.53	161.55	152.58	140.01	139.11	138.22
Per Mi 8-25	11.40	15.00	14.10	13.40	12.69	11.99	11.00	10.93	10.86
Fixed 25-50	305.95	250.00	218.00	207.10	196.20	185.30	170.04	168.95	167.86
Per Mi 25-50	12.00	17.00	16.65	15.82	14.99	14.15	12.99	12.90	12.82
Fixed >50	400.70	250.00	218.00	207.10	196.20	185.30	170.04	168.95	167.86
Per Mi >50	14.65	17.00	16.65	15.82	14.99	14.15	12.99	12.90	12.82
Term Discount									
1-Year	15%								
3-Years	20%								
5-Years	20%								

### DS3 - Arizona and Washington

4/1/89		6/25/1993 to Present							
		M-T-M	1-yr	2-yr	3-yr	4-yr	5-yr	6-yr	7-yr
NAC(Cap of 1)	1,400.00	1,282.50	1,244.03	1,205.55	1,154.25	1,090.13	1,026.00	993.94	961.88
Mileage:									
Fixed 0-8	625.48	590.90	573.17	555.45	531.81	502.27	472.72	457.95	443.18
Per Mi 0-8	34.44	51.26	49.89	48.18	46.13	43.74	41.00	39.64	38.61
Fixed 8-25	628.56	593.75	575.94	558.13	534.38	504.69	475.00	460.16	445.31
Per Mi 8-25	36.82	35.15	34.10	33.04	31.46	29.88	28.12	27.24	26.36
Fixed 25-50	633.72	598.50	580.55	562.59	538.65	508.73	478.80	463.84	448.88
Per Mi 25-50	41.10	51.11	49.74	48.04	45.99	43.61	40.88	39.52	38.50
Fixed >50	655.14	619.40	600.82	582.24	557.46	526.49	495.52	480.04	464.55
Per Mi >50	58.41	57.92	56.37	54.44	52.12	49.42	46.33	44.79	43.63
Term Discount									
1-Year	15%								
3-Years	20%								
5-Years	20%								